UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,080	09/04/2001	Junko Fukuda	213304US6	1165

22850 7590 09/29/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
CASCHERA, ANTONIO A	

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/944,080	Applicant(s) FUKUDA ET AL.	
	Examiner Antonio A Caschera	Art Unit 2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-9,11,13-17,19,21-25,27 and 29-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-9,11,13-17,19,21-25,27 and 29-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 5, 7, 9, 13, 15 and 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Fiddian-Greene et al (U.S. Patent 6,029,076), Matthews, III et al. (U.S. Patent 6,313,851) and further in view of Crooks et al. (U.S. Patent 5,208,736).

In reference to claims 1 and 9, Bird discloses a compact computer having a base with an alphanumeric keyboard and a display screen pivotally connected to the base so that it can fold inwards towards the base or pivot into a position facing away from the base (see column 2, lines 9-15, Figure 1 and Figure 5). Bird also discloses a first operating means operable under the condition where the back surface of the display body is close to the base by a retractable keypad which, the office interprets, may be used under the condition where the back surface of the display body is close to the base (see column 2, lines 59-62, #40 of Figures 3 and 5) as the

decision of when to operate the first operating means is seen as a matter of design choice whereby, for example, the keypad of Bird could operate when the display panel is in tablet mode (see Figure 5 of Bird) or when in common laptop computing mode (see Figure 2) . Note, the office interprets the keypad located "outside" of the display body (see #40 Figure 3 is not apart of the display body). Bird also discloses a trackball assembly controlling the display screen cursor which the office sees as equivalent to the second operating means of applicant's claims (see column 5, lines 19-48). Bird also discloses the trackball assembly to be a self contained unit allowing for the unit to pivot about the base and also allowing it to be totally detached, to be used in various orientations with respect to the display (see column 6, lines 41-51). Bird does not explicitly disclose using the keypad to select a processing item to be executed from a system menu however, Fiddian-Greene et al does. Fiddian-Greene et al. disclose medical diagnostic equipment (see column 1, lines 25-27) whereby a computer keypad is utilized for selecting operation modes from a menu of the computer (see column 25, lines 54-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made for Bird to implement the retractable keypad as a selectable input device as disclosed by Fiddian-Green et al. in order to create a simpler control of a computing device by minimizing possible key selections using only the keys of the keypad. Bird does not explicitly disclose the trackball selecting a processing item to be executed from a menu however Matthews, III et al. does. Matthews, III et al. discloses an improved user interface for a computer operating system wherein a windowed display environment such as Windows95 provides a menu with multiple choices which can be selected by a mouse or keyboard (see column 2, lines 4-7 of Matthews). Note, the trackball of Bird inherently controls the cursor position on the display and acts like a

mouse. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mouse menu selection techniques of Matthews with the compact computer of Bird and keypad selection techniques of Fiddian-Greene et al. in order to provide a user friendly control device for navigating through menus and operating the computing system. Although Bird does disclose the trackball outside of and operating independently of contact with a display screen (see column 41-43), Bird does not explicitly disclose the trackball provided on the display body. Crooks et al. discloses a trackball embedded in the housing of a display device and facing the user (see column 2, lines 46-56 of Crooks et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the specifically positioned trackball of Crooks et al. with the compact computer of Bird, keypad selection techniques of Fiddian-Greene et al. and mouse menu selection techniques of Matthews in order to provide the user's hand with a natural position thereby reducing discomfort and fatigue usually suffered when using a commonly placed trackball device, while improving accuracy and simplicity to the user (see column 2, lines 60-67 of Crooks et al.). Note, the office interprets the computing devices included in Bird, Matthews, III et al. and Crooks et al. to inherently execute various kinds of information processing based on an OS (Windows95 of Matthews, III et al.) and application programs. Further such processing is commonly performed by the standard computer system.

In reference to claims 5 and 13, Bird, Fiddian-Greene et al., Matthews, III et al. and Crooks et al. disclose all of the claim limitations as applied to claims 1 and 9 respectively above. Bird discloses the keypad having keys which can be pressed (see column 5, lines 9-10) and a

trackball unit which can be rotated and pressed (see column 5, lines 31-48). Note, in reference to claim 13, the office interprets the sphere functionally equivalent to the dial of applicant's claim.

In reference to claims 7, 15 and 23, Bird, Fiddian-Greene et al., Matthews, III et al. and Crooks et al. disclose all of the claim limitations as applied to claims 1, 9 and 17 respectively. Note, the office interprets the canceling of a display inherent in the windowed environment of Matthews, III et al. as the "Start" menu in Windows95 is cleared after a selection is made.

3. Claims 8, 16, 17, 21, 24, 25, 29, 31, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Fiddian-Greene et al (U.S. Patent 6,029,076), Matthews, III et al. (U.S. Patent 6,313,851), Crooks et al. (U.S. Patent 5,208,736) and further in view of Lin et al. (U.S. Patent 6,552,738 B1).

In reference to claims 8, 16 and 24, Bird, Fiddian-Greene et al., Matthews, III et al. and Crooks et al. disclose all of the claim limitations as applied to claims 1, 9 and 17 respectively. Lin et al. discloses a method and apparatus providing a user interface for control of a display device via a computer system (see columns 1-2, lines 66-7). Lin et al. also discloses the user interface resembling a system menu showing adjustable items to tweak display settings (see column 4, lines 30-36 and Figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the tweaking of user settings of Lin et al. with the compact computer of Bird, keypad selection techniques of Fiddian-Greene et al., mouse menu selection techniques of Matthews and the specifically positioned trackball of Crooks et al. in order to provide a user interface for control of a display device allowing for adjustments to parameters to be made without significant increases in cost (see columns 1-2, lines 66-10 of Lin et al.).

In reference to claims 17 and 25, claims 17 and 25 are equivalent in scope to claims 1 and 9 above and therefore are rejected under similar rationale. Further, Lin et al. discloses selection of one processing item (interpreted as the adjustable attributes of the monitor display, shown in Figure 3, "Bright," "Contrast," etc.) configuring the display monitor (see column 4, lines 46-57 and Figure 3). Lin et al. discloses the displaying of more, fewer or different display parameters in the user interface (see column 4, lines 42-45) therefore, the office believes that it would have been obvious to one of ordinary skill in the art to include an output signal format display parameter in the user interface of Lin et al. to select between different/multiple format output display devices, i.e. NTSC, PAL, VGA etc. The office interprets the setting of the format of an output display signal equivalent to a communication setting, between a display controller and display device, because of the definition of the term, "communicate" which reads, "(2) : to transmit information, thought or feeling so that it is satisfactorily received or understood," (see *Merriam-Webster's Collegiate Dictionary, 10th edt.* Merriam-Webster, Inc. ©2002. page 232). The signal generating and receiving devices must operate on the same format signal so that signals are correctly understood and thus displayed accurately. Therefore, the office interprets such a communication setting as a second one of the processing items when displayed in the user interface of Lin et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the tweaking of user settings of Lin et al. with the compact computer of Bird, keypad selection techniques of Fiddian-Greene et al., mouse menu selection techniques of Matthews and the specifically positioned trackball of Crooks et al. in order to provide a user interface for control of a display device allowing for adjustments to parameters to be made without significant increases in cost (see columns 1-2, lines 66-10 of Lin et al.).

In reference to claims 21 and 29, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al. and Lin et al. disclose all of the claim limitations as applied to claims 17 and 25 respectively above. Bird discloses the keypad having keys which can be pressed (see column 5, lines 9-10) and a trackball unit which can be rotated and pressed (see column 5, lines 31-48). Note, in reference to claim 29, the office interprets the sphere functionally equivalent to the dial of applicant's claim.

In reference to claim 31, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al. and Lin et al. disclose all of the claim limitations as applied to claim 25. Note, the office interprets the canceling of a display inherent in the windowed environment of Matthews, III et al. as the "Start" menu in Windows95 is cleared after a selection is made.

In reference to claims 33 and 35, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al. and Lin et al. disclose all of the claim limitations as applied to claims 17 and 25 respectively above. Lin et al. discloses the user interface configuring screen brightness/luminance of a display device (see column 4, lines 51-54 and Figure 3).

4. Claims 3, 6, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Fiddian-Greene et al (U.S. Patent 6,029,076), Matthews, III et al. (U.S. Patent 6,313,851), Crooks et al. (U.S. Patent 5,208,736) and in further view of Nishida et al. (U.S. Patent Des. 409,583).

In reference to claims 3 and 11, Bird discloses a compact computer having a base with an alphanumeric keyboard and a display screen pivotally connected to the base so that it can fold inwards towards the base or pivot into a position facing away from the base (see column 2, lines 9-15, Figure 1 and Figure 5). Bird also discloses a first operating means operable under the

condition where the back surface of the display body is close to the base by a retractable keypad which, the office interprets, may be used under the condition where the back surface of the display body is close to the base (see column 2, lines 59-62, #40 of Figures 3 and 5) as the decision of when to operate the first operating means is seen as a matter of design choice whereby, for example, the keypad of Bird could operate when the display panel is in tablet mode (see Figure 5 of Bird) or when in common laptop computing mode (see Figure 2) . Note, the office interprets the keypad located "outside" of the display body (see #40 Figure 3 is not apart of the display body). Bird also discloses a trackball assembly controlling the display screen cursor which the office sees as equivalent to the second operating means of applicant's claims (see column 5, lines 19-48). Bird also discloses the trackball assembly to be a self contained unit allowing for the unit to pivot about the base and also allowing it to be totally detached, to be used in various orientations with respect to the display (see column 6, lines 41-51). Bird does not explicitly disclose using the keypad to select a processing item to be executed from a system menu however, Fiddian-Greene et al does. Fiddian-Greene et al. disclose medical diagnostic equipment (see column 1, lines 25-27) whereby a computer keypad is utilized for selecting operation modes from a menu of the computer (see column 25, lines 54-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made for Bird to implement the retractable keypad as a selectable input device as disclosed by Fiddian-Green et al. in order to create a simpler control of a computing device by minimizing possible key selections using only the keys of the keypad. Bird does not explicitly disclose the trackball selecting a processing item to be executed from a menu however Matthews, III et al. does. Matthews, III et al. discloses an improved user interface for a computer operating system

wherein a windowed display environment such as Windows95 provides a menu with multiple choices which can be selected by a mouse or keyboard (see column 2, lines 4-7 of Matthews). Note, the trackball of Bird inherently controls the cursor position on the display and acts like a mouse. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mouse menu selection techniques of Matthews with the compact computer of Bird and keypad selection techniques of Fiddian-Greene et al. in order to provide a user friendly control device for navigating through menus and operating the computing system. Although Bird does disclose the trackball outside of and operating independently of contact with a display screen (see column 41-43), Bird does not explicitly disclose the trackball provided on the display body. Crooks et al. discloses a trackball embedded in the housing of a display device and facing the user (see column 2, lines 46-56 of Crooks et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the specifically positioned trackball of Crooks et al. with the compact computer of Bird, keypad selection techniques of Fiddian-Greene et al. and mouse menu selection techniques of Matthews in order to provide the user's hand with a natural position thereby reducing discomfort and fatigue usually suffered when using a commonly placed trackball device, while improving accuracy and simplicity to the user (see column 2, lines 60-67 of Crooks et al.). Note, the office interprets the computing devices included in Bird, Matthews, III et al. and Crooks et al. to inherently execute various kinds of information processing based on an OS (Windows95 of Matthews, III et al.) and application programs. Further such processing is commonly performed by the standard computer system. Neither Bird, Fiddian-Green et al., Matthews, III et al. nor Crooks et al. explicitly disclose a photographing case having a photographic function however Nishida et al.

does. Nishida et al. discloses a laptop computer with an integrated camera attached thereto (see Figures 13-15 of Nishida et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the laptop and camera attached thereto of Nishida et al. with the compact computer of Bird, keypad selection techniques of Fiddian-Greene et al., mouse menu selection techniques of Matthews and the specifically positioned trackball of Crooks et al. in order to allow the user to view the display screen while taking a photograph of someone/something or adjusting display settings, creating a more efficient and user friendly computer environment.

In reference to claims 6, and 14, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al. and Nishida et al. disclose all of the claim limitations as applied to claims 3 and 11 respectively above. Bird discloses the keypad having keys which can be pressed (see column 5, lines 9-10) and a trackball unit which can be rotated and pressed (see column 5, lines 31-48). Note, in reference to claim 14, the office interprets the sphere functionally equivalent to the dial of applicant's claim.

5. Claims 19, 22, 27, 30, 32, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Fiddian-Greene et al (U.S. Patent 6,029,076), Matthews, III et al. (U.S. Patent 6,313,851), Crooks et al. (U.S. Patent 5,208,736), Nishida et al. (U.S. Patent Des. 409,583) and in further view of Lin et al. (U.S. Patent 6,552,738 B1).

In reference to claims 19 and 27, claims 19 and 27 are equivalent in scope to claims 3 and 11 above and therefore are rejected under similar rationale. Further, Lin et al. discloses selection of one processing item (interpreted as the adjustable attributes of the monitor display, shown in Figure 3, "Bright," "Contrast," etc.) configuring the display monitor (see column 4, lines 46-57

and Figure 3). Lin et al. discloses the displaying of more, fewer or different display parameters in the user interface (see column 4, lines 42-45) therefore, the office believes that it would have been obvious to one of ordinary skill in the art to include an output signal format display parameter in the user interface of Lin et al. to select between different/multiple format output display devices, i.e. NTSC, PAL, VGA etc. The office interprets the setting of the format of an output display signal equivalent to a communication setting, between a display controller and display device, because of the definition of the term, "communicate" which reads, "(2) : to transmit information, thought or feeling so that it is satisfactorily received or understood," (see *Merriam-Webster's Collegiate Dictionary, 10th edt.* Merriam-Webster, Inc. ©2002. page 232). The signal generating and receiving devices must operate on the same format signal so that signals are correctly understood and thus displayed accurately. Therefore, the office interprets such a communication setting as a second one of the processing items when displayed in the user interface of Lin et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the tweaking of user settings of Lin et al. with the compact computer of Bird, keypad selection techniques of Fiddian-Greene et al., mouse menu selection techniques of Matthews and the specifically positioned trackball of Crooks et al. in order to provide a user interface for control of a display device allowing for adjustments to parameters to be made without significant increases in cost (see columns 1-2, lines 66-10 of Lin et al.).

In reference to claims 22 and 30, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al., Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claims 19 and 27 respectively above. Bird discloses the keypad having keys which can be pressed (see column 5, lines 9-10) and a trackball unit which can be rotated and pressed (see column 5, lines 31-48).

Note, in reference to claim 30, the office interprets the sphere functionally equivalent to the dial of applicant's claim.

In reference to claim 32, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al., Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claim 27 above. Lin et al. discloses a method and apparatus providing a user interface for control of a display device via a computer system (see columns 1-2, lines 66-7). Lin et al. also discloses the user interface resembling a system menu showing adjustable items to tweak display settings (see column 4, lines 30-36 and Figure 3).

In reference to claims 34 and 36, Bird, Fiddian-Greene et al., Matthews, III et al., Crooks et al., Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claims 19 and 27 respectively above. Lin et al. discloses the user interface configuring screen brightness/luminance of a display device (see column 4, lines 51-54 and Figure 3).

Response to Arguments

6. Applicant's arguments, see pages 16-19 and 22-23, filed 7/13/04, with respect to the rejection(s)of claim(s) 1, 3, 5-9, 11, 13-17, 19, 21-25, 27 and 29-36 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Fiddian-Greene et al., Matthews, III et al. and Crooks et al..

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (703) 305-1391. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (703)-308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Matthew C. Bella

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

aac

9/13/04